

# PROJECT DESCRIPTION GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF A TRAFFIC SIGNAL AT THE INTERSECTION OF MD 410 AND RIVERDALE ROAD IN PRINCE GEORGES COUNTY.

## INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 4 NEMA PHASES. EASTBOUND AND WESTBOUND MD 410/RIVERDALE ROAD SHALL OPERATE AS CONCURRENTLY, WHILE THE SIDE STREET MOVEMENT SHALL OPERATE ALONE. VIDEO DETECTION SHALL BE INSTALLED FOR ACTUATION OF RIVERDALE ROAD LEFT TURN PHASE, FOR THE SIDE STREET PRESENCE DETECTION AND FOR THE MD 410 WESTBOUND SAMPLING.

## SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

### PROJECT CONTACTS:

MR. MAJIB SHAKIB, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7358  
MR. DENNIS MCMAHON, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (301) 513-7336  
MR. WAYNE MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7304  
MR. AUGI REBISH, UTILITY ENGINEER  
PHONE: (301) 513-7350  
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

### EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	VIDEO DETECTION INTERFACE EQUIPMENT (FOR 1-4 CAMERAS)	EA	1
971017	BASE MOUNTED (SIZE-6) CABINET AND CONTROLLER (MSHA SPECIFICATIONS) WITH	EA	1
	2-4 CHANNEL RACK MOUNTED DETECTOR AMPLIFIERS	SF	37
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:	EA	1
	R10-12 (30"X36") MAST ARM MOUNT	EA	2
	R3-5(L) (30"X36") MAST ARM MOUNT	EA	1
	D-3(2) (16" X VAR.) MAST ARM MOUNT		

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

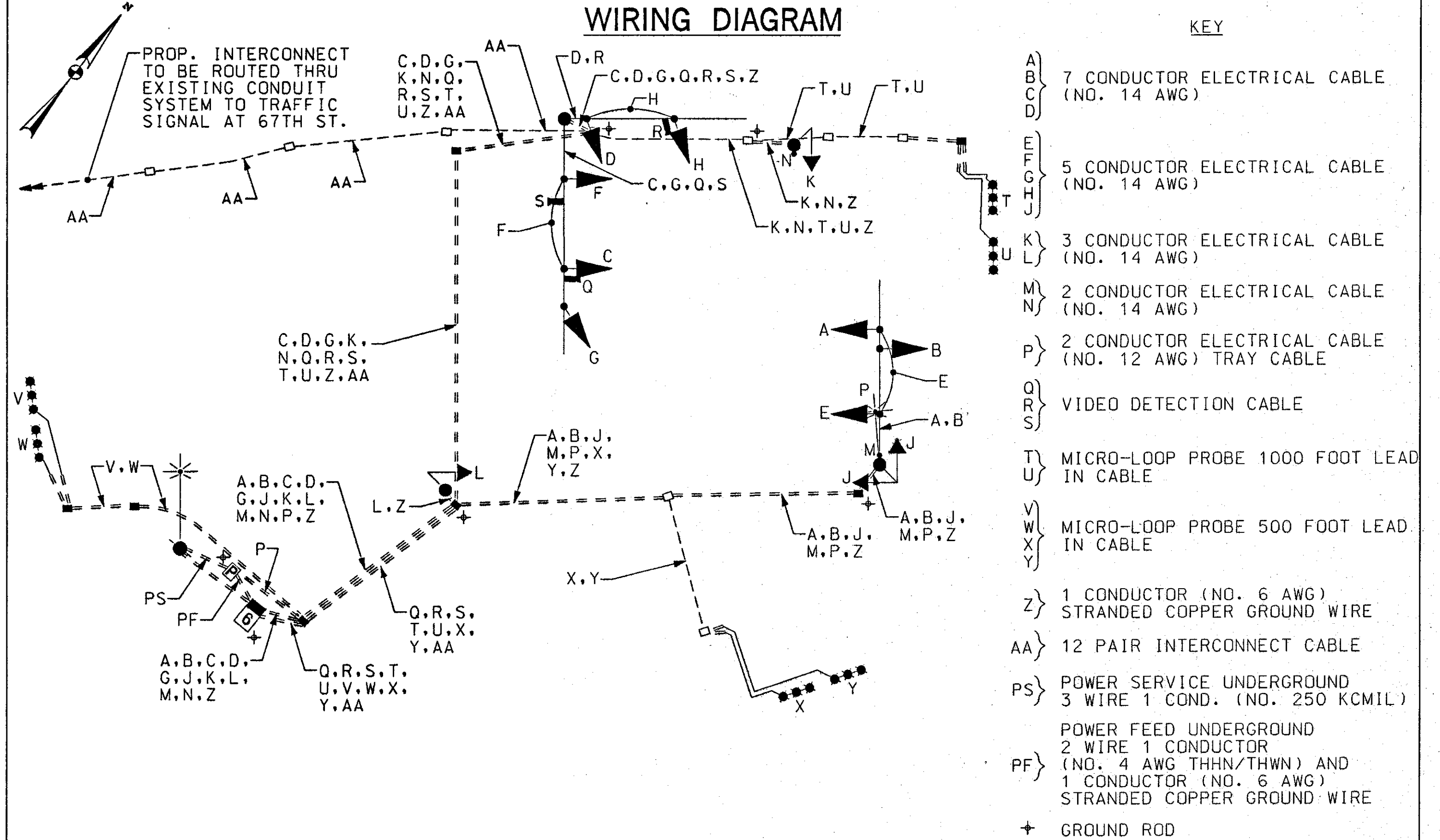
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	3
585620	12 INCH HEAT APPL. WHITE PERMANENT PREFORMED THERMO. PAVEMENT MARKING	LF	400
585624	24 INCH HEAT APPL. WHITE PERMANENT PREFORMED THERMO. PAVEMENT MARKING	LF	100
800000	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1
800000	CABLE 1-CONDUCTOR, NO. 250 KCMIL	LF	220
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	11
801607	INSTALL SHEET ALUMINUM SIGN	SF	37
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	365
805011	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE	LF	30
805125	2 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	70
805135	3 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	210
805140	4 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	100
805155	4 INCH SCHED. 80 PVC CONDUIT-SLOTTED	LF	340
805160	LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	LF	20
807202	METERED SERVICE PEDESTAL	EA	1
810010	CABLE 1-CONDUCTOR, NO. 4 AWG-THHN/THWN	LF	40
810550	MICROLOOP PROBE, 500 FOOT LEAD IN CABLE	EA	4
810555	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE	EA	2
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	7
816001	VIDEO DETECTION CAMERA	EA	3
816005	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	2
818021	STEEL POLE WITH TWIN 50 FOOT MAST ARM	EA	1
818030	STEEL POLE WITH A SINGLE 38 FOOT MAST ARM	EA	1
822002	12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)	LF	1300
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	1
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	6
860272	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	28
860278	12 INCH PEDESTRIAN SIGNAL HEAD SECTION - POLE MOUNT	EA	4
860282	12 INCH PEDESTRIAN SIGNAL HEAD SECTION - PEDESTAL POLE MOUNT	EA	4
860292	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	2
862102	SAW CUT FOR SIGNAL (LOOP DETECTOR)	LF	185
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	410
861106	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)	LF	330
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	470
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	860
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	210
865001	PUSHBUTTON AND SIGN	EA	2
866101	10 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	1
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILLIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

## WIRING DIAGRAM

### KEY



## PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 1 AND 5	G	G	G	G	G	R	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	R	R	R	FLOW	FLOW	DW	DW
1 AND 5 CHANGE	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 1 AND 6	R	R	GG	GG	G	R	R	R	DW	DW	DW	DW
1 AND 6 CHANGE	R	R	YG	YG	Y	R	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	G	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	G	G	G	DW	DW	FLOW	FLOW
4 ALT CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

SG-02

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 410 AND  
RIVERDALE ROAD**

GENERAL INFORMATION PLAN

SCALE 1"=20' DATE 01/10/05 CONTRACT NO. PG4775176

DESIGNED BY J. WEAVER COUNTY PRINCE GEORGES

DRAWN BY J. WEAVER LOGMILE 16041005.37

CHECKED BY S. RENZI T.I.M.S. NO. G460

F.A.P. NO. TOD NO.

DRAWING NO. TS-2443B

SHEET NO. OF



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